MEDIA PURCHASE GOAL CORRELATION SYSTEM

Field of Invention

The invention pertains to determining the relative value of media purchases. More

particularly, the invention relates to methods for determining a correlation between a media

5   purchase and stated world-wide network-related goals.

Background of the Invention

Various systems have been developed for correlating advertising media purchases with

product sales or other stated goals. U.S. Patent No. 6,243,750 issued to *Verma* is directed

10   toward a method and system for measuring web site access requests. The referenced web

page requested is sent to a user system and rendered through a web browser where an

appended identifying tag is removed. Using the striped off tag, an application running on the

advertiser's web server determines if the tag has already been assigned a corresponding

counter. When a counter corresponding to the tag has been assigned, the server application

15   increments the number of "hits" shown in the counter. On the other hand, if a counter

corresponding to the tag has not been assigned, the server application creates a corresponding

counter and sets the counter value to one.

U.S. Patent No. 6,223,215 issued to *Hunt et al.*, is directed towards tracking a user's

purchases on the Internet by associating the user with an inbound source and session

20   identifier. The operation begins in response to a new user initiating access to an interactive

network site. A unique session ID is assigned from a front-end session database, and relevant

user data is recorded in the session database associated with the session ID. For example, the

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relevant user data includes the user's inbound source "origin" such as a unique source ID of a banner "advertisement" on a search engine Internet site.

U.S. Patent No. 5,227,874, issued to *Von Kohorn* is directed towards a method for measuring the effectiveness of stimuli on decisions of shoppers. Two signals are broadcast by

5   a central station to each of two receiving stations. One of these two signals is a program signal for presenting on a television screen a program generated in the studio. The second of the two signals is an instructional or command signal for operation of a response unit. The instructional signal provides appropriate commands to the response unit for evaluating, rejecting, or accepting and scoring audience responses to questions raised in the televised

10   program. In both of the receiving stations the response unit includes a keyboard whereby a person in the remote viewing audience enters a response. The response unit includes a dispenser that dispenses a record of score and/or responses in a permanent recording medium such as a card of plastic or similar material, including a strip of magnetizable material upon which the score and/or responses have been recorded.

15   U.S. Patent No. 6,006,197 issued to *D'Eon et al.* is directed toward a system and method for assessing effectiveness of Internet marketing campaigns. A PC can access one or more sites that can present one or more banner advertisements. When one of the advertisements is clicked on by a user to, for example, hyperlink to the site of the advertiser represented by the advertisement, tracker software unobtrusively tracks the user around the

20   advertiser's site. The advertisement identification, although being ignored as part of an actual network path, is buffered and then correlated with the visitor identification. The tracker module records the identifications of users, as represented by the visitor identifications, who click on the advertisements. Each time a user clicks on one of the advertisements, an

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"impression" of the clicked-on advertisement by visitor identification is thereby established and recorded.

U.S. Patent No. 5,948,061 issued to *Merriman et al.* is directed towards a method of delivery, targeting and measuring advertising over networks. As part of the "click through"

5   process, when the user clicks on the banner or other advertising object displayed by the user's browser, the user's browser transmits a message to the ad server. The ad server notes the address of the computer of the browser (or any other identifier such as a cookie or a digital signature) that generated the message and transmits back the URL of the advertiser's web page so that the user's web browser generates a message to contact the advertiser's web site.

10   The ad server process notes that a "click-through" for an advertisement has occurred and updates various databases. While other variations exist, the above-described designs for systems for correlating advertising media purchases with product sales or other stated goals are typical of those encountered in the prior art.

It is an objective of the present invention to provide a means for purchasers of non-

15   Internet related advertising media to correlate these purchases to stated goals related to Internet activity. Such goals include online sales, downloads, arrivals at specified web addresses, user data capture, sales lead generation, identification of dealer locations, viewing of specific text, viewing of specific images and receiving sound transmissions. Non-Internet related media include movies, video, television, interactive television, radio and print media.

20   It is a further objective to provide such correlation for media purchases in non-Internet related media made within a stated geographic area. It is a still further objective of the invention to provide the above described correlation and related statistical analysis relating the period of the media purchase to the occurrence of the stated goals within the period and an identified

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"residual" period. It is yet a further objective to provide graphical and tabular statistical analysis tools for analyzing and displaying the correlations determined between the media purchases and the achieved goals.

While some of the objectives of the present invention are disclosed in the prior art,

5   none of the inventions found include all of the requirements identified.

Summary of the Invention

The present invention addresses most of the deficiencies of prior art media purchase goal correlation system inventions and satisfies all of the objectives described above.

10   A media purchase goal correlation system providing the desired features may be constructed from the following components. An advertising media purchase is provided. The media purchase relates to a predetermined subject matter and is placed in movies, video, television, interactive television, radio or print media within a stated geographic area. The media purchase includes either an Internet website address or other unique trackable identifier for

15   accessing further information related to the subject matter of the media purchase.

A first database is provided. The first database contains records relating to the start date, end date, and stated geographic area for a plurality of media purchases. Means are provided for inputting and maintaining records in the first database. Means are provided for determining the geographic location associated with an Internet Protocol address. Means are

20   provided for grouping the geographic locations into uniform stated geographic areas.

A second database is provided. The second database contains records correlating Internet Protocol addresses of Internet users with stated geographic areas. Means are provided for inputting and maintaining records in the second database. Means are provided for

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determining the Internet Protocol address of an Internet user accessing the Internet website address. Means are provided for tracking the timing of Internet-related goals achieved by the Internet user related to his accessing the Internet website address. Means are provided for accessing the second database and assigning a stated geographic area to the user's Internet-

5   related goals.

Means are provided for inputting the timing of occurrences of the Internet-related goals and assigned stated geographic area to the first database. Means are provided for correlating and reporting the timing of Internet-related goals achieved by the Internet user with the start date, end date and a residual period for media purchases within the stated

10   geographic area.

In a variant of the invention, a media purchase effectiveness report is provided. The effectiveness report includes a media type, media name, stated geographic area of the media purchase, start date, end date, summary of Internet traffic originating in the stated geographic area between the start and end dates, and summary of Internet-related goals achieved for

15   Internet users located within the stated geographic area between the start and end dates and during the residual period. The media purchase effectiveness report will permit a media buyer to correlate volume of Internet traffic and related goal achievement resulting from a media purchase in a stated geographic area.

In another variant, the media effectiveness report is compiled continuously from the

20   start date to the end date of the media purchase and for the residual period and is made available through the Internet, whereby a media buyer may evaluate the initial and residual Internet-related impact of any media purchase.

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In still another variant, the Internet-related goals comprise sales, downloads, arrivals at specified web addresses, user data capture, sales lead generation, identification of dealer locations, viewing of specific text, viewing of specific images and receiving sound transmissions.

5   In a further variant of the invention, the means for correlating and reporting the timing of Internet-related goals achieved by an Internet user with the start date, end date and a residual period for media purchases within the stated geographic area includes graphical representations of media purchases for specified periods for stated geographical areas. It further includes graphical representations of timed occurrences of media goals achieved in the

10   stated geographical areas, and graphical representations of the correlation of the timed occurrences of media goals with the media purchase periods for the areas.

In another variant, the means for correlating and reporting the timing of Internet-related goals achieved by an Internet user with the start date, end date and a residual period for media purchases within the stated geographic area includes pattern recognition systems for

15   analyzing data yielding the graphical representations to produce a media purchase decision.

In still another variant, the means for correlating and reporting the timing of Internet-related goals achieved by an Internet user with the start date, end date and a residual period for media purchases within the stated geographic area includes baseline statistical reports of media goals achieved absent media purchases, statistical reports detailing media goals

20   achieved after media purchases, and reports comparing baseline statistics to those resulting from media purchases in stated geographical areas.

In yet another variant of the invention, the means for correlating and reporting the timing of Internet-related goals achieved by an Internet user with the start date, end date and a

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residual period for media purchases within the stated geographic area includes historical reports detailing effectiveness of media purchases in stated geographical areas and means for comparing the historical reports to current media goal achievement reports to determine a differential effect of new media purchases. Such comparisons are useful for predicting the

5   effect of future media purchases.

Additional tabular reports, illustrating unique Internet user visits to an Internet web site, related sales and a percentage showing the conversion of the visits to sales for identified media purchasers, in stated geographic areas over various time periods are also provided.

An appreciation of the other aims and objectives of the present invention and an

10   understanding of it may be achieved by referring to the accompanying drawings and the detailed description of a preferred embodiment.

Description of the Drawings

Figure 1 is a schematic illustration of media purchases, a first database containing

15   media purchase and goal achievement data and means for updating the database;

Figure 2 is a schematic illustration of a means for determining a geographic location associated with an Internet Protocol address;

Figure 3 is a schematic illustration of a means for grouping geographic locations into uniform stated geographic areas;

20   **Figure** is a schematic illustration of a second database containing data identifying stated geographic areas for Internet Protocol addresses and means for updating the database;

Figure 5 is a schematic illustration of a means for tracking the timing of Internet-related goals achieved by an Internet user related to his accessing of an Internet web site;

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Figure 6 is a schematic illustration of a media purchase effectiveness report;

Figure 7 is a schematic illustration of a means for accessing the **Figure 6** report over the Internet;

Figure 8 is a schematic illustration of a graphical representation of media purchases

5   for a stated time period;

Figure 9 is a schematic illustration of a graphical representation of media goals achieved for a stated time period;

Figure 10 is a schematic illustration of a graphical representation of a correlation of media goals achieved with purchases for a stated time period;

10   **Figure 11** is a schematic illustration of a baseline report for media goals achieved without a media purchase over a stated period;

Figure 12 is a schematic illustration of a report for media goals achieved with a media purchase over a stated period;

Figure 13 is a schematic illustration of a report detailing percent change between the

15   baseline period and subsequent period with media purchase;

Figure 14 is a schematic illustration of a historical media purchase effectiveness report;

Figure 15 is a schematic illustration of a report comparing the historical period with a period including media purchases showing percentage and ratio of changes in media goals

20   achieved;

Figure 16 **is a schematic illustration of use of a pattern recognition system to develop media purchase decisions;**

Figure 17 is a schematic illustration of a tabular report illustrating unique Internet user visits to an Internet web site, related sales and a percentage showing the conversion of the visits to sales for a media purchaser;

Figure 18 is a schematic illustration of a tabular report illustrating unique Internet user
5   visits to an Internet web site, related sales and a percentage showing the conversion of the visits to sales for stated geographic areas also illustrating stations for media purchases;

Figure 19 is a schematic illustration of a tabular report illustrating unique Internet user visits to an Internet web site on a daily basis, related sales and a percentage showing the conversion of the visits to sales for stated geographic areas also illustrating stations for media
10   purchases; and

Figure 20 is a schematic illustration of a graphical representation showing computed and predicted effects of media purchases.

Detailed Description of the Preferred Embodiment

15   Figures 1-5 illustrate a media purchase goal correlation system 10 providing the desired features that may be constructed from the following components. As illustrated in Figure 1, an advertising media purchase 14 is provided. The media purchase 14 relates to a predetermined subject matter 18 and is placed in movies, video, television, interactive television, radio or print media within a stated geographic area 22. The media purchase 14
20   includes either an Internet website address 26 or other unique trackable identifier for accessing further information related to the subject matter 18 of the media purchase 14.

A first database 30 is provided. The first database 30 contains records 34 relating to the start date 38, end date 42, and stated geographic area 22 for a plurality of media purchases

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14. Means **46** are provided for inputting and maintaining records **34** in the first database **30**.

As illustrated in **Figure 2**, means **50** are provided for determining the geographic location **54** associated with an Internet Protocol address **58**. As illustrated in **Figure 3**, means **62** are provided for grouping the geographic locations **54** into uniform stated geographic areas **22**.

5   As illustrated in **Figure 4**, a second database **66** is provided. The second database **66** contains records **70** correlating Internet Protocol addresses **58** of Internet users **74** with stated geographic areas **22**. Means **78** are provided for inputting and maintaining records **70** in the second database **66**. As illustrated in **Figure 5**, means **82** are provided for determining the Internet Protocol address **58** of an Internet user **74** accessing the Internet website address **26**.

10   Means **86** are provided for tracking the timing **90** of Internet-related goals **94** achieved by the Internet user **74** related to his accessing the Internet website address **26**. As illustrated in **Figure 4**, means **98** are provided for accessing the second database **66** and assigning a stated geographic area **22** to the user's Internet-related goals **94**.

As illustrated in **Figure 1**, means **102** are provided for inputting the timing **90** of

15   occurrences of the Internet-related goals **94** and assigned stated geographic area **22** to the first database **30**. Means **108** are provided for correlating and reporting the timing **90** of Internet-related goals **94** achieved by the Internet user **74** with the start date **38**, end date **42** and a residual period **106** for media purchases **14** within the stated geographic area **22**.

In a variant of the invention, as illustrated in **Figure 6**, a media purchase effectiveness

20   report **110** is provided. The effectiveness report **110** includes a media type **114**, media name **118**, stated geographic area **22** of the media purchase **14**, start date **38**, end date **42**, summary of Internet traffic **122** originating in the stated geographic area **22** between the start **38** and end dates **42**, and summary of Internet-related goals **94** achieved for Internet users **74** located

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within the stated geographic area **22** between the start **38** and end **42** dates and during the residual period **106**. The media purchase effectiveness report **110** will permit a media buyer (not shown) to correlate volume of Internet traffic **122** and related goal **94** achievement resulting from a media purchase **14** in a stated geographic area **22**.

5   In another variant, as illustrated in **Figure 7**, the media effectiveness report **110** is compiled continuously from the start date **38** to the end date **42** of the media purchase **14** and for the residual period **106** and is made available through the Internet **128**, whereby a media buyer may evaluate the initial and residual Internet-related impact of any media purchase **14**.

        In still another variant, as illustrated in **Figure 6**, the Internet-related goals **94**

10   comprise sales **130**, downloads **134**, arrivals at specified web addresses **138**, user data capture **142**, sales lead generation **144**, identification of dealer locations **148**, viewing of specific text **152**, viewing of specific images **156** and receiving sound transmissions (not shown).

        In a further variant of the invention, as illustrated in **Figures 8-10**, the means **108** for correlating and reporting the timing **90** of Internet-related goals **94** achieved by an Internet

15   user **74** with the start date **38**, end date **42** and a residual period **106** for media purchases **14** within the stated geographic area **22** includes graphical representations **146** of media purchases **14** for specified periods **150** for stated geographical areas **22**, as illustrated in **Figure 8**. As illustrated in **Figure 9**, it further includes graphical representations **154** of timed occurrences of media goals **94** achieved in the stated geographical areas **22**, and graphical

20   representations **158** of the correlation of the timed occurrences of media goals **94** with the media purchase **14** periods for the areas **22**, as illustrated in **Figure 10**.

        In another variant, as illustrated in **Figure 16**, the means **108** for correlating and reporting the timing of Internet-related goals **94** achieved by an Internet user **74** with the start

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date **38**, end date **42** and a residual period **106** for media purchases **14** within the stated geographic area **22** includes pattern recognition systems **162** for analyzing data yielding the graphical representations **146, 154, 158** to produce a media purchase decision **166**.

In still another variant, as illustrated in **Figures 11-13**, the means **108** for correlating

5   and reporting the timing of Internet-related goals **94** achieved by an Internet user **74** with the start date **38**, end date **42** and a residual period **106** for media purchases **14** within the stated geographic area **22** includes baseline statistical reports **170** of media goals **94** achieved absent media purchases **14**, as illustrated in **Figure 11**, statistical reports **174** detailing media goals **94** achieved after media purchases **14,** as illustrated in **Figure 12**, and reports **178** comparing

10 baseline statistics **170** to those resulting from media purchases **14** in stated geographical areas **22,** as illustrated in **Figure 13.** Such comparisons and predictions may also me shown in graphical form as illustrated in **Figure 20**.

In yet another variant of the invention, as illustrated in **Figures 14** and **15**, the means **108** for correlating and reporting the timing of Internet-related goals **94** achieved by an

15 Internet user **74** with the start date **38**, end date **42** and a residual period **106** for media purchases **14** within the stated geographic area **22** includes historical reports **182** detailing effectiveness of media purchases **14** in stated geographical areas **22,** as illustrated in **Figure 14**, and means **186** for comparing the historical reports **182** to current media goal achievement reports **190** to determine a differential effect of new media purchases **14,** as illustrated in

20 **Figure 15.** Such comparisons are useful for predicting the effect of future media purchases **14.** Such comparisons and predictions may also me shown in graphical form as illustrated in **Figure 20.**

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Additional tabular reports, illustrating unique Internet user visits to an Internet web site, related sales and a percentage showing the conversion of the visits to sales for identified media purchasers, in stated geographic areas over various time periods, as illustrated in **Figures 17-19**, are also provided.

5   The media purchase goal correlation system **10** has been described with reference to particular embodiments. Other modifications and enhancements can be made without departing from the spirit and scope of the claims that follow.